

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT	15 and (head near1 retract\$)	52	<u>L30</u>
USPT	15 and (head near2 retract\$)	98	<u>L29</u>
USPT	116 and ((347/32)!.CCLS.)	19	<u>L28</u>
USPT	126 not 122	18	<u>L27</u>
USPT	15 and (head near5 retract\$ same platen)	24	<u>L26</u>
USPT	124 and (laser or head) near5 retract\$	2	<u>L25</u>
USPT	((101/453 101/454 101/455 101/456 101/457 101/458 101/459 101/460 101/461 101/462 101/463.1 101/464 101/465 101/466 101/467)!.CCLS.)	2027	<u>L24</u>
USPT	((101/467)!.CCLS.) and (head or laser) near5 retract\$	2	<u>L23</u>
USPT	15 and (head near5 retract\$ near10 platen)	6	<u>L22</u>
USPT	15 and (head near5 retract\$ near10 cylinder)	0	<u>L21</u>
USPT	15 and ((head near5 retract\$) not cap)	39	<u>L20</u>
USPT	15 and (head near5 retract\$ near10 protect\$)	9	<u>L19</u>
USPT	11 and (ink jet head near5 retract\$ same protect\$)	1	<u>L18</u>
USPT	116 and printing plate	0	<u>L17</u>
USPT	15 and (head near5 retract\$)	207	<u>L16</u>
USPT	110 and 114	5	<u>L15</u>
USPT	15 and (tank or reservoir) near5 (stir\$ or agitat\$)	27	<u>L14</u>
USPT	16 and 17 and 18	26	<u>L13</u>
USPT	16 and 17 and 18 and 19	1	<u>L12</u>
USPT	16 and 17 and 18 and 19 and 110	0	<u>L11</u>
USPT	15 and (head near5 clean\$)	1128	<u>L10</u>
USPT	15 and (tank or reservoir) same (recirculat\$)	130	<u>L9</u>
USPT	15 and (tank or reservoir) same (concentrat\$ or composition or density)	553	<u>L8</u>
USPT	15 and (tank or reservoir) same (stir\$ or agitat\$ or mix\$)	178	<u>L7</u>
USPT	15 and (tank or reservoir) same (temp\$ or heat\$)	1339	<u>L6</u>
USPT	11 not 14	8300	<u>L5</u>
USPT	11 not 12	10257	<u>L4</u>
USPT	11 and 12	8300	<u>L3</u>
USPT	11 and ink jet\$	8300	<u>L2</u>
USPT	((347/\$)!.CCLS.)	18557	<u>L1</u>

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
JPAB,EPAB,DWPI	118 and (ink jet\$)	53	<u>L20</u>
JPAB,EPAB,DWPI	118 and (ink jet\$ and electrostatic\$)	7	<u>L19</u>
JPAB,EPAB,DWPI	kato, eiichi.in.	1108	<u>L18</u>
JPAB	JP-10204355-A.did.	1	<u>L17</u>
JPAB	JP10-204355.pn.	0	<u>L16</u>
JPAB	JP10204355	1	<u>L15</u>
JPAB	JP10204355.pn.	0	<u>L14</u>
JPAB	111 and (ink jet\$ and electrostatic\$)	7	<u>L13</u>
JPAB	111 and ink jet\$	52	<u>L12</u>
JPAB	kato, eiichi.in.	934	<u>L11</u>
USPT,JPAB,EPAB,DWPI	1997JP-349737.ap.	0	<u>L10</u>
USPT,JPAB,EPAB,DWPI	1997JP-021013.ap.	0	<u>L9</u>
USPT	17 and (tank same (recirculat\$ or stir\$ or temp\$ or concentrat\$))	2	<u>L8</u>
USPT	16 and ink jet\$	68	<u>L7</u>
USPT	kato, eiichi.in.	178	<u>L6</u>
USPT,JPAB,EPAB,DWPI	1998JP-0089493.ap.	1	<u>L5</u>
USPT,JPAB,EPAB,DWPI	(1997JP-0027158 or 1997JP-0061768 or 1997JP-0252178).ap.	1	<u>L4</u>
USPT,JPAB,EPAB,DWPI	(6143806 or 6140389 or 6136889 or 6120655 or 6080449 or 6133341 or 6127452 or 61069846098545).pn.	9	<u>L3</u>
USPT,JPAB,EPAB,DWPI	(6143806 or 6140389 or 6136889 or 6120655 or 6080449).pn.	7	<u>L2</u>
USPT	(ink jet\$ and (nonaqueous same electric resistance same dielectric constant))	10	<u>L1</u>

b1-2 is a1), to one of the terminals of a main chain of a polymer having a repeating unit of formula I (wherein V0 is -COO- and the like, D0 is a 8-22C hydrocarbon group and a1-2 is H and the like), (for example, a compound of formula III), and a dispersion-stabilizing resin, which has a repeating unit of formula IV (wherein X1 is -COO- and the like, Y1 is a 10-32C aliphatic group and d1-2 is a1) and has a partially cross-linked main chain, is subjected to polymerization, thereby producing resin particles. The resultant resin particles are disposed in a non-aqueous solvent having a specific electric resistance and permittivity (for example, Isopar G).

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Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Clip Img	Image
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☐ 38. Document ID: JP 10219164 A

L12: Entry 38 of 52

File: JPAB

Aug 18, 1998

PUB-NO: JP410219164A

DOCUMENT-IDENTIFIER: JP 10219164 A

TITLE: OIL-BASE INK FOR INK JET TYPE PLATE PRINTING PLATE

PUBN-DATE: August 18, 1998

INVENTOR-INFORMATION:

NAME

KATO, EIICHI

OSAWA, SADA0

ISHII, KAZUO

ASSIGNEE-INFORMATION:

NAME

FUJI PHOTO FILM CO LTD

COUNTRY

N/A

APPL-NO: JP09041665

APPL-DATE: February 10, 1997

INT-CL (IPC): C09D 11/00; B41C 1/10; B41M 5/00

ABSTRACT:

PROBLEM TO BE SOLVED: To obtain an oil-base ink having re-dispersibility, storage stability and plate wear by dispersing resin particles obtained by polymerizing a monofunctional monomer and a limited substituent-containing monomer in the presence of a soluble dispersion- stabilizing resin the polymer chain of which is partially crosslinked in a nonaqueous medium having specified electrical properties.

SOLUTION: The plate printing plate is prepared by forming a

SOLUTION: The plate printing plate is prepared by forming a plate having an image receiving layer containing zinc oxide and a binder resin and having a contact angle of 50° or above with planographic water on a water-resistant support and forming an image on the layer by an ink jet system by using an ink containing dispersible resin particles in a nonaqueous carrier fluid having an electrical resistance of $10^9\Omega$ or above and a permittivity of 3.5 or below. The dispersed resin particles are obtained by polymerizing a monofunctional monomer with a solution containing a substituent- containing monomer of formula I (wherein E1 is an aliphatic group or the like; U1 is formula III or the like; and a1 and a2 are each hydrogen or the like) and a partially crosslinked soluble dispersion stabilizing resin having repeating units of formula II (wherein X1 is formula IV or the like; Y1 is an aliphatic group; and b1 and b2 are each hydrogen or the like).

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Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Clip Img	Image
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☐ 39. Document ID: JP 10219163 A

L12: Entry 39 of 52

File: JPAB

Aug 18, 1998

PUB-NO: JP410219163A

DOCUMENT-IDENTIFIER: JP 10219163 A

TITLE: OIL-BASE INK FOR INK JET TYPE PLATE PRINTING PLATE

PUBN-DATE: August 18, 1998

INVENTOR-INFORMATION:

NAME

KATO, EIICHI

ASSIGNEE-INFORMATION:

NAME

FUJI PHOTO FILM CO LTD

COUNTRY

N/A

APPL-NO: JP09041664

APPL-DATE: February 10, 1997

INT-CL (IPC): C09D 11/00; B41C 1/10; B41M 5/00; C08F 290/00;
C09D 155/00

ABSTRACT:

PROBLEM TO BE SOLVED: To obtain an oil-base ink having a good printability by using non- water-dispersed resin particles obtained by polymerizing a monofunctional monomer in the presence of a dispersion-stabilizing resin which is a comb copolymer comprising a macromonomer being a soluble part and a monofunctional monomer being an insoluble part and colloiddally

monofunctional monomer being an insoluble part and colloiddally dispersed in a nonaqueous medium having specified electrical properties.

SOLUTION: The plate printing plate is prepared by forming a plate having an image receiving layer containing zinc oxide and a binder resin and having a contact angle of 50° or above with planographic water on a water-resistant support and forming an image on the layer by an ink jet system by using an ink containing dispersible resin particles in a nonaqueous carrier fluid having an electrical resistance of 10⁹Ω; or above and a permittivity of 3.5 or below. The dispersible resin particles are obtained by polymerizing a monofunctional monomer in the presence of colloidal copolymer comprising a main component of formula I (wherein X0 is formula II or phenylene; R" is hydrogen or the like; Q' is an alkyl or the like; and a1 and a2 are each H, a halogen or the like), a macromonomer terminated with formula III (wherein R1=X0; and b1 and b2 are each the same as a1 or a2) and a monofunctional monomer.

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Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Clip Img	Image
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☐ 40. Document ID: JP 10204356 A

L12: Entry 40 of 52

File: JPAB

Aug 4, 1998

PUB-NO: JP410204356A
DOCUMENT-IDENTIFIER: JP 10204356 A
TITLE: OIL-BASED INK FOR INK JET TYPE PRINTING PLATE FOR
PLATEMAKING

PUBN-DATE: August 4, 1998

INVENTOR-INFORMATION:

NAME

KATO, EIICHI

OSAWA, SADA0

ISHII, KAZUO

ASSIGNEE-INFORMATION:

NAME

FUJI PHOTO FILM CO LTD

COUNTRY

N/A

APPL-NO: JP09021017

APPL-DATE: January 20, 1997

INT-CL (IPC): C09D 11/00; B41C 1/10; B41M 5/00; C08L 33/14;
C09D 155/00; C08F 290/06

ABSTRACT:

PROBLEM TO BE SOLVED: To achieve excellent re-dispersibility, storage stability and durability to repeated in printing, by forming copolymer resin particles through polymerizing a monofunctional monomer to a dispersion-stabilizing resin, which is dispersed in a colloidal form in a non-aqueous solution containing a macromonomer of a specific weigh average molecular weight having a polymerizable double bond group only at one terminal of the main chain and the monofunctional monomer.

SOLUTION: The dispersion-stabilizing resin, which contains a macromer of a weight average molecular weight of 1×10^3 to 2×10^4 containing a component represented by formula I (wherein X0 is -COO-, -CO- and the like, Q1 is a 10-32C alkyl and a1 and a2 are H, a halogen and the like), as a main component, and having a polymerizable double bond group represented by formula II, (wherein X1=X0 and b1, b2=a1, a2), only at one terminal of the main chain thereof; and a monofunctional monomer, which becomes insoluble in a non-aqueous solvent when it is polymerized is prepared. The monofunctional monomer is polymerized to obtain resin particles dispersed in a non-aqueous carrier liquid having an electric resistance of $10^9 \Omega \cdot \text{cm}$ or more and a permittivity of 3.5 or less.

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Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Draw Desc	Clip Img	Image
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☐ 41. Document ID: JP 10204355 A

L12: Entry 41 of 52

File: JPAB

Aug 4, 1998

PUB-NO: JP410204355A

DOCUMENT-IDENTIFIER: JP 10204355 A

TITLE: OIL-BASE INK COMPOSITION FOR INK JET

PUBN-DATE: August 4, 1998.

INVENTOR-INFORMATION:

NAME

KATO, EIICHI

OSAWA, SADA0

ISHII, KAZUO

ASSIGNEE-INFORMATION:

NAME

FUJI PHOTO FILM CO LTD

COUNTRY

N/A

APPL-NO: JP09021012

APPL-DATE: January 20, 1997

INT-CL (IPC): C09D 11/00; B41M 5/00

ABSTRACT:

PROBLEM TO BE SOLVED: To provide an oil-base ink compsn. for ink jet that is excellent in storage stability and in reproducibility of images in repeated continuous form plate production.

SOLUTION: This compsn. is prepd. by dispersing hydrophobic resin particles solid at least at normal temp. in a nonaq. solvent having an electric resistace of $10^9 \Omega \cdot \text{cm}$ or higher and a permittivity of 3.5 or lower and by incorporating at least one 12C or higher branched aliph. alcohol in an amt. of 0.1-40 pts.wt. (based on 1 pt.wt. resin particles) into the same. The resin particles are pref. positive or negative electroscopic particles.

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Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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☐ 42. Document ID: JP 10204354 A

L12: Entry 42 of 52

File: JPAB

Aug 4, 1998

PUB-NO: JP410204354A
DOCUMENT-IDENTIFIER: JP 10204354 A
TITLE: OIL-BASED INK FOR INK JET TYPE PRINTING PLATE FOR
PLATEMAKING

PUBN-DATE: August 4, 1998

INVENTOR-INFORMATION:

NAME

KATO, EIICHI

OSAWA, SADA0

ISHII, KAZUO

ASSIGNEE-INFORMATION:

NAME

FUJI PHOTO FILM CO LTD

COUNTRY

N/A

APPL-NO: JP09021011

APPL-DATE: January 20, 1997

INT-CL (IPC): C09D 11/00; B41M 5/00; C09D 155/00; C08F 290/06

ABSTRACT:

PROBLEM TO BE SOLVED: To improve the redispersibility, storage stability and durability to repeated printing, by dispersing, in a non-aqueous carrier liquid, resin particles of a copolymer prepared by polymerizing a monofunctional monomer in the presence of a dispersion-stabilizing resin, which is obtained using a macromonomer having a polymerizable double bond group at a terminal thereof as a comonomer component and which has a structure containing a repeating unit in the main chain and/or a comb thereof.

SOLUTION: The oil-based ink is composed of (A) a dispersion-stabilizing resin, which is obtained using a macromonomer of a weight average molecular weight of 1×10^3 to 2×10^4 having a polymerizable double bond group represented by formula I and which has a repeating unit represented by formula II as a component, and (B) a monofunctional monomer, which is soluble in a non-aqueous solvent and become insoluble with the increasing polymerization degree, such as acrylic acid. This ink is prepared by dispersing copolymer particles obtained by polymerizing component B in the presence of component A, into a non-aqueous carrier liquid having an electric resistance of $10^9 \Omega \cdot \text{cm}$ or more and a permittivity of 3.5 or less, together with a colorant. In formula I, X_0 is $-\text{COO}-$, $-\text{CO}-$ and the like; and a_1 and a_2 are each H, a halogen and the like. In formula II, $X_1 = X_0$; Q_1 is a 6-32C aliphatic group; and b_1 , $b_2 = a_1$, a_2 .

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